

IEEE Standard for Interconnecting Distributed Resources

Bill Williams

Legislative Representative

IEEE-USA Energy Policy Committee





What are IEEE and IEEE-USA?

- The Institute of Electrical and Electronics Engineers Inc. (IEEE) is a non-profit, technical professional association of more than 350,000 individual members in 150 countries.
- IEEE is a leading authority in technical areas ranging from computer engineering, biomedical technology and telecommunications, to electric power, aerospace and consumer electronics, among others.
- IEEE-USA is an organizational unit of the IEEE, Inc. created in 1973 to support the career and public policy interests of IEEE's U.S. members.





IEEE-USA Activities

- Washington Office Major emphasis on career and professional activities
- Technology Policy Activities
- Two professional staffers supporting technology policy in Washington Office
- Five Technology Policy Committees





IEEE-USA Technology Policy Committees

- Committee on Communications and Information Policy
- Energy Policy Committee
- Medical Technology Policy Committee
- Research and Development Policy Committee
- Committee on Transportation Policy





Energy Policy Committee

The overall objectives

... assist in the resolution of energy problems,

....provision of rational, sound, technical and professional counsel, and

...where the IEEE is competent, major efforts directed to energy activities of US legislative and executive branches.





Energy Policy Committee Priority Issues (2001-02)

- National Energy Policy
- Electric Utility Restructuring & System Reliability
- Energy Research and Development
- Interconnection and Distributed Generation Standards (in support of soon to be released IEEE interconnection standard P1547)





What is the IEEE Standards Association?

- IEEE's Standards Association is one of the pre-eminent standards bodies in the U.S
- The IEEE-SA supports an industry-led consensus process for the development of standards to:
 - facilitate trade and commerce
 - create and expand markets
 - increase competitiveness in industry
 - foster quality design and manufacture
 - safeguard against hazards





IEEE Standard P1547

- Title: Standard for Interconnecting Distributed Resources with Electric Power Systems:
- Purpose: Provide a uniform standard for interconnection of distributed resources with electric power systems, and requirements relevant to the performance, operation, testing, safety considerations, and maintenance of the interconnection





IEEE P1547 Standards Development Approach

- Voluntary consensus standard -- hallmark of the IEEE standards process
- Open to all interested parties
- Working group of over 300
- This effort is on the fast track





Interconnection Legislation

• Jeffords/Wilson (S.933/H.R.1945) -- Amends the Federal Power Act to prescribe implementation guidelines for: (1) the interconnection of a generating facility with the distribution facilities of the local distribution utility; (2) the interconnection of a generating facility with the transmission facilities of a transmitting utility; and (3) sales of backup power by a local distribution utility and by a transmitting utility to an interconnected generating facility.





Interconnection Legislation

• Daschle/Bingaman Energy Bill (S.1766) - Requires states to consider standards for competitive access to the distribution grid, competitive pricing of service, and simplified standard contracts for interconnection; for interconnection of distributed generation to the distribution grid (Sec.242) and Authorizes the Sec. Of Energy to provide technical assistance to the states in implementing the standards (Sec.243)





Interconnection Legislation

- **Barton Bill (H.R.3406)** Directs FERC to establish uniform **interconnection** standards for both distribution and transmission facilities, and prescribes interconnection procedures for local distribution utilities, generating and transmission facilities (Sec. 101)
- Others: H.R.954, H.R.1045, H.R.2412, and S.1403





Key Points from IEEE-USA June 22, 1999 Testimony

- Professional society, consensus standards are the best approach
- Quality standards take time to develop
- The P1547 standards process can be accelerated
- Congress and DOE are encouraged to support the development of standards on interconnection technology as a common public good.



DOE TESTIMONY (July 19, 2001)

"The Department has been supporting efforts by industry through the Institute of Electrical and Electronics Engineers (IEEE) to develop voluntary national interconnection standards. This effort has been in effect for the past several years and has involved extensive working group deliberations involving staff from electric utilities as well as equipment manufacturers and distributed energy project developers. The technical standard being developed by the IEEE could well provide a basis for the rule making process called for in both bills and, at the minimum, should be referenced to ensure that the progress that has been made by this group is not lost or duplicated unnecessarily. " -- Testimony by David Garman, Assistant Secretary, Energy Efficiency and Renewable Energy before the Senate Energy and Natural Resources Committee.





IEEE-USA Letter to Congress on Interconnection Standards

"...IEEE-USA recommends that Congress and federal and state agencies support the adoption of interconnection standards developed by a consensus of professional societies on a voluntary basis, such as those established by IEEE's Standards Coordinating Committee-21 P-1547, a working group that was chartered in 1998 for developing the interconnection standard...." -- IEEE-USA Letter to Senate Energy and Natural Resources Members (August 30, 2001)





FOR MORE INFORMATION

Bill Williams

Legislative Representative
IEEE-USA

1828 L Street, N.W., Suite 1202
Washington, DC 20036-5104
(0)202-785-0017, x8331
(Email) bill.williams@ieee.org
(Web) http://www.ieeeusa.org

